

DEICER Manuchehr Shirmohamadi 510-594-0300

REMARKS

Claims 1-20 are pending and rejected.

Claims 1 and 2 have been amended.

Rejections under 35 USC 112

Claims 10-15 are rejected as indefinite as "the energy storage module" lacks antecedent basis in claim 1. Claim 1 has been amended to traverse this rejection.

Claims 2-5, 7-9, 12-15, and 19-20 are rejected as not enabled, particularly it is said that the specification does not teach how the energy gathering module is functionally connected within the device and to the suspended line to remove ice deposits. It is submitted that in view of the disclosure, one of skill in the art would have little trouble recognizing how the energy gathering module may be functionally connected with the energy storage module and how the energy storage module may be linked via the trigger mechanism to the energy delivery module to impart energy to a suspended line so as to remove ice deposits. Any mechanical engineer of even the most modest training would be able to use the information disclosed to provide the appropriate functional link between the energy gathering module, the energy storage module and the energy delivery module. A number of examples are given in the specification and in the claims, and the examiner is directed to, for example, page 12, and figures 10, 11 and 12, 14, 16 and 17. At page 12, lines 15-17 the specification says that energy may be transferred to the storage module via a gear system or a shaft or linkage system or via electrical wires. A gear system is shown in figure 16 and 17. The mechanism of figure 17 is described at page 17 in which motion of wires is used to move a weight attached via an indexing clutch to a rotating shaft (energy gathering). As the shaft (47) rotates, springs (48) are wound up (energy storage). The trigger mechanism allows the wide portion of the linkage assembly to push the pin (51) which engages the decoupling device allowing the two shafts to turn independently causing the retained lines to move apart rapidly, which movement is abruptly stopped when the wide portion of the linkage assembly contacts the housing (energy delivery). In another example, the mechanism of figure 16 is

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described at page 17 in considerable detail that described how the energy gathering mechanism is functionally attached to an energy storage mechanism, i.e., the two-part body (32) oscillating about bearings (33) causing an indexing clutch to wind a spring (35). In another example, at page 12, lines 5-7 the specification describes a photovoltaic cell (the energy gathering module) that is used to gather energy which can be stored in a battery and then converted to kinetic energy via a motor. A further example is given at page 12, lines 1-4 in which a simple electrically inductive system is described. In view of these examples and other descriptions in the figures and specification, it is submitted that the invention is enabled and that one of skill in the art would understand how the various modules are associated together functionally.

Rejections under 35 USC 102

Claims 1-2, 6, 10-11 and 16-18 are rejected as anticipated by Allaire. An anticipation rejection requires that each and every element of the claimed reaction be disclosed in a single anticipating reference. Allaire does not disclose all the elements of the present invention as currently amended. Allaire does not disclose a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly. Allaire discloses a device that employs a motorised rotating assembly including an electrical motor (22) which produces a torque required for twisting the cable (12). The device of Allaire does not and cannot be used to provide a perpendicular force on the line or to displace the line laterally. The applicant therefore respectfully asks for these rejections under 35 USC 102 to be withdrawn.

Rejections under 35 USC 103

Claims 3-5, 7-9, 12-15 and 18-20 are rejected under 35 USC 103 over Allaire. In view of the present claim amendments, Allaire does not teach or suggest the limitations of claim 1, i.e., a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly. The applicant therefore respectfully asks for these rejections under 35 USC 103 to be withdrawn.

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CONCLUSION

In light of the above amendments and remarks, the inventor submits that the present application is fully in condition for allowance. If it would help, please call the inventor, Manuchehr Shirmohamadi at 510-594-0300.

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